

**FIGURE 2 A**

XbaI	*	PstI	HqaI
<u>TCTAGAGTC</u>	ATGAAACAAC	AAAAACGGCT	TTACGCCCGA
			<u>TTGCTGACGC</u>
			HqaI
			TGTTATTTC
<u>GCTCATCTTC</u>	TTGCTGCCCTC	ATTCTGCAGC	AGCGGGCGCA
			AATCTTAATG
			<u>GGACGCTGAT</u>
<u>GCAGTATTTT</u>	GAATGGTACA	TGCCCAATGA	CGGCCAACAT
			TGGAAGCGTT
			TGCAAAACGA
<u>CTCGGCATAT</u>	TTGGCTGAAC	ACGGTATTAC	TGCCGCTCTGG
			ATTCCCCCGG
			CATATAAGGG
<u>AACGAGCCAA</u>	GCGGATGTGG	GCTACGGTGC	TTACGACCCTT
			TATGATTTAG
			GGGAGTTTCA
<u>TCAAAAAAGGG</u>	ACGGTTCCGA	CAAAGTACGG	CACAAAAGGA
			GAGCTGCAAT
			CTGCGGATCAA
<u>AAAGTCTTCAT</u>	TCCCGCCGACA	TTAAACGTTTA	CGGGGATGTG
			GTCATCAACC
			ACAAAGGCGGG
<u>CGCTGATGCG</u>	ACCGAAGATG	TAACCGCGGT	TGAAGTCGAT
			CCCGCTGACC
			GCAACCGCGT
<u>AAATTTCAGGA</u>	GAACACCTAA	TTAAAGCCTG	GACACATTTT
			CATTTTCCGG
			GGCGCGGCAG
<u>CACATACAGC</u>	GATTTTAAAT	GGCATTGGTA	CCATTTTGAC
			GGAACCGATT
			GGGACGAGTC
<u>CCGAAAGCTG</u>	AACCGCATCT	ATAAGTTTCA	AGGAAAGGCT
			TGGGATTGGG
			AAGTTTCCAA
<u>TGAAAACGGC</u>	AACTATGATT	ATTTGATGTA	TGCCGACATC
			GATTATGACC
			ATCCTGATGT
<u>CGCAGCAGAA</u>	ATTAAGAGAT	GGGGCACTTG	GTATGCCAAT
			GAACTGCAAT
			TGGACGGTTT
<u>CCGTCTTGAT</u>	GCTGTCAAAC	ACATTAAATT	TTCTTTTTTG
			CGGGATTGGG
			TTAATCATGT
<u>CAGGGA AAAA</u>	ACGGGGAAGG	AAATGTTTAC	GGTAGCTGAA
			TATTGGCAGA
			ATGACTTGGG

FIGURE 2 B

CGCGCTGGAA AACTATTGGA ACAAACAATA TTTTAATCAT TCAGTGTTTG ACGTGCCGCT  
TCATTATCAG TTCCATGCTG CATCGACACA GGGAGGCGGC TATGATATGA GGAAATTGCT  
GAACGGTACG GTCGTTTCCA AGCATCCGTT GAAATCGGTT ACATTTGTCG ATAACCATGA  
Sall  
TACACAGCCG GGGCAATCGC TTGAGTCGAC TGTCCAAACA TGGTTTAAGC CGCTTGCTTA  
CGCTTTTATT CTCACAAAGG AATCTGGATA CCTCAGGTT TTCTACGGGG ATATGTACGG  
GACGAAAGGA GACTCCAGC GCGAAATCC TGCCTTGAAA CACAAAATTG AACCGATCTT  
AAAAGCGAGA AACAGTATG CGTACGGAGC ACAGCATGAT TATTTCGACC ACCATGACAT  
TGTCGGCTGG ACAAGGGAAG GCGACAGCTC GGTGCAAAAT TCAGGTTTGG CGGCATTAAT  
AACAGACGGA CCCGGTGGG CAAAGCGAAT GTATGTCGGC CGGCAAAACG CCGGTGAGAC  
ATGGCATGAC ATTACCGGA ACCGTTGGA GCCGGTTGTC ATCAATTTCG AAGGCTGGG  
AGAGTTTCAC GTAAACGGCG GGTGCGTTTC AATTATGTT CAAAGATAGA AGAGCAGAGA  
BamHI  
GGACGGATT CCTGAAGGA ATCCGTTTTT TTATTTTGCC CGTCTTATAA ATTTCTTTGA  
TTACATTTTA TAATTAATT TAACAAAGTG TCATCAGCCC TCAGGAAGGA CTTGCTGACA  
GTTGAATCG CATAGGTAAG GCGGGGATGA AATGGCAACG TTATCTGATG TAGCAAAGAA  
BclI  
AGCAAAATGT TCGAAAATGA CCGTATCGCG GGTGATCA

SEQ ID NO:5

FIGURE 3

Oligonucleotide duplex A

	<u>NcoI</u>	<u>BamHI</u>	<u>HindIII</u>	
	[ ]	[ ]	[ ]	
5'	GGGTTT	TATTTT	TAATTT	TCTTTT
3'	CCCAAAA	TAAAAA	TATGAA	GGTGTAC
				CCCATTC
				CAACGGA
				TCCATCC
				ATGGGTA
				ACGGATC
				CA 3'
				SEQ ID NO:6
				5' SEQ ID NO:7

Oligonucleotide duplex B

	<u>NcoI</u>		<u>HgaI</u>	SITE
	[ ]		$\alpha$ -	AMYLA
				SE
5'	CATG	GCAA	TCTTA	TATGG
3'	CGTT	AGAA	TACCT	GCGAC
				TACGTC
				AT 3'
				SEQ ID NO:8
				5' SEQ ID NO:9
				Met mature $\alpha$ -Amylase

**FIGURE 2 A**

XbaI	*	PstI	HqaI
<u>TCTAGAGTC</u>	ATGAACAAC	AAAAACGGCT	TTACGCCCGA <u>TTGCTGACGC</u> TGTTATTTCG
			<u>HqaI</u>
GCTCATCTTC	TTGCTGCCTC	<u>ATTCTGCAGC</u>	AGCGGGCGCA AATCTTAATG <u>GGACGCTGAT</u>
GCAGTATTTT	GAATGGTACA	TGCCCAATGA	CGGCCAACAT TGGAAAGCGTT TGCAAAACGA
CTCGGCATAT	TTGGCTGAAC	ACGGTATTAC	TGCCGTCTGG ATTCCCCCGG CATATAAGGG
AACGAGCCAA	GCGGATGTGG	GCTACGGTGC	TTACGACCTT TATGATTTAG GGGAGTTTCA
TCAAAAAAGG	ACGGTTCGGA	CAAAGTACGG	CACAAAAGGA GAGCTGCAAT CTGCGATCAA
AAGTCTTCAT	TCCCGCGACA	TTAAACGTTA	CGGGGATGTG GTCATCAACC ACAAAGGCGG
CGCTGATGCG	ACCGAAGATG	TAACCGCGGT	TGAAGTCGAT CCCGCTGACC GCAACCGCGT
AATTCAGGA	GAACACCTAA	TTAAAAGCCTG	GACACATTTT CATTTTCCGG GCGCGGCGAG
CACATACAGC	GATTTTAAAT	GGCATTTGGTA	CCATTTTGAC GGAACCGATT GGGACGAGTC
CCGAAAAGCTG	AACCGCATCT	ATAAGTTTCA	AGGAAAGGCT TGGGATTGGG AAGTTTCCAA
TGAAAAACGGC	AACATATGATT	ATTTGATGTA	TGCCGACATC GATTATGACC ATCCTGATGT
CGCAGCAGAA	ATTAAAGAGAT	GGGGCACTTG	GTATGCCAAT GAACTGCAAT TGGACGGTTT
CCGTCTTGAT	GCTGTCAAAC	ACATTAAATT	TTCTTTTTTG CGGGATTGGG TTAATCATGT
CAGGGAAAAA	ACGGGGAAGG	AAATGTTTAC	GGTAGCTGAA TATTGGCAGA ATGACTTGGG

CGCGCTGGAA AAC TATTGA ACAAACAAA TTTTAATCAT TCAGTGT TTG ACGTGCCGCTT

TCATTATCAG TTCCATGCTG CATCGACACA GGGAGGCGGC TATGATATGA GGA AATTGCT

GAACGGTACG GTCGTTTCCA AGCATCCGTT GAAATCGGTT ACATTTGTG ATAACCATGA

Sal I

TACACAGCCG GGGCAATCGC TTGAGTCGAC TGTCCAACA TGGTTAAGC CGCTTGCTTA

CGCTTTTATT CTCACAAGG AATCTGGATA CCTCAGGTT TTCTACGGG ATATGTACGG

GACGAAAGGA GACTCCCAGC GCGAAATCC TGCCTTGAAA CACAAAATG AACCGATCTT

AAAAGCGAGA AAACAGTATG CGTACGGAGC ACAGCATGAT TATTTGACC ACCATGACAT

TGTCGGCTGG ACAAGGGAAG GCGACAGCTC GGTGCAAAAT TCAGGTTTGG CGGCATTAAT

AACAGACGGA CCCGGTGGG CAAAGCGAAT GTATGTCGGC CGGCAAAACG CCGGTGAGAC

ATGGCATGAC ATTACCGAA ACCGTTCGGA GCCGTTGTC ATCAATTGG AAGCTGGGG

AGAGTTTCAC GTAAACGGG GGTCCGTTTC AATTATGTT CAAAGATAGA AGACAGAGA

GGACGGATTT CCTGAAGGAA ATCCGTTTTT TTATTTTGCC CGTCTTATAA ATTCTTTGA  
TTACATTTTA TAATTAATTT TAACAAAGTG TCATCAGCCC TCAGGAAGGA CTGCTGACA  
GTTTGAATCG CATAGGTAAG GCGGGGATGA AATGGCAACG TTATCTGATG TAGCAAAGAA  
BclI  
AGCAAAATGTG TCGAAAATGA CCGTATCGCG GGTGATCA SEQ 78 NO: 5

FIGURE 3

Oligonucleotide duplex A

	NcoI	BamHI	HindIII
	[ ]	[ ]	[ ]
5'	GGGTTT	TTTAA	TTTCTTTCAAA
3'	CCCAAA	TAAAA	TATGAAGTGTACCCATGCGGTAACGGATCCA

SEQ ID NO: 6  
SEQ ID NO: 7

Oligonucleotide duplex B

	NcoI	HgaI SITE α-AMYLASE
	[ ]	[ ]
5'	CATG	GCAAA
3'	CGTTA	GAAATTAACCTGCGACTACGTCAT

Met mature α-Amylase

SEQ ID NO: 8  
SEQ ID NO: 9